

- 154.1305 Liquid level gauging system: Standards.
- 154.1310 Closed gauge shut-off valve.
- 154.1315 Restricted gauge excess flow valve.
- 154.1320 Sighting ports, tubular gauge glasses, and flat plate type gauge glasses.
- 154.1325 Liquid level alarm system: All cargo tanks.
- 154.1330 Liquid level alarm system: Independent tank type C.
- 154.1335 Pressure and vacuum protection.
- 154.1340 Temperature measuring devices.
- 154.1345 Gas detection.
- 154.1350 Flammable gas detection system.
- 154.1360 Oxygen analyzer.
- 154.1365 Audible and visual alarms.
- 154.1370 Pressure gauge and vacuum gauge marking.
- 154.1375 Readout for temperature measuring device: Marking.

SAFETY EQUIPMENT

- 154.1400 Safety equipment: All vessels.
- 154.1405 Respiratory protection.
- 154.1410 Decontamination shower.
- 154.1415 Air compressor.
- 154.1420 Stretchers and equipment.
- 154.1430 Equipment locker.
- 154.1435 Medical first aid guide.
- 154.1440 Antidotes.

Subpart D—Special Design and Operating Requirements

- 154.1700 Purpose.
- 154.1702 Materials of construction.
- 154.1705 Independent tank type C.
- 154.1710 Exclusion of air from cargo tank vapor spaces.
- 154.1715 Moisture control.
- 154.1720 Indirect refrigeration.
- 154.1725 Ethylene oxide.
- 154.1730 Ethylene oxide: Loading and off-loading.
- 154.1735 Methyl acetylene-propadiene mixture.
- 154.1740 Vinyl chloride: Inhibiting and inerting.
- 154.1745 Vinyl chloride: Transferring operations.
- 154.1750 Butadiene or vinyl chloride: Refrigeration system.
- 154.1755 Nitrogen.
- 154.1760 Liquid ammonia.

Subpart E—Operations

- 154.1800 Special operating requirements under Part 35 of this chapter.
- 154.1801 Certificates, letters, and endorsements: U.S. flag vessels.
- 154.1802 Certificates, letters, and endorsements: Foreign flag vessels.
- 154.1803 Expiration of Certificates of Compliance.
- 154.1804 Document posted in wheelhouse.
- 154.1806 Regulations on board.

- 154.1808 Limitations in the endorsement.
- 154.1809 Loading and stability manual.
- 154.1810 Cargo manual.
- 154.1812 Operational information for terminal personnel.
- 154.1814 Cargo information cards.
- 154.1816 Cargo location plan.
- 154.1818 Certification of inhibition.
- 154.1820 Shipping document.
- 154.1822 Shipping document: Copy for transfer terminal.
- 154.1824 Obstruction of pumproom ladderways.
- 154.1826 Opening of cargo tanks and cargo sampling.
- 154.1828 Spaces containing cargo vapor: Entry.
- 154.1830 Warning sign.
- 154.1831 Persons in charge of transferring liquid cargo in bulk or preparing cargo tanks.
- 154.1834 Cargo transfer piping.
- 154.1836 Vapor venting as a means of cargo tank pressure and temperature control.
- 154.1838 Discharge by gas pressurization.
- 154.1840 Protective clothing.
- 154.1842 Cargo system: Controls and alarms.
- 154.1844 Cargo tanks: Filling limits.
- 154.1846 Relief valves: Changing set pressure.
- 154.1848 Inerting.
- 154.1850 Entering cargo handling spaces.
- 154.1852 Air breathing equipment.
- 154.1854 Methane (LNG) as fuel.
- 154.1858 Cargo hose.
- 154.1860 Integral tanks: Cargo colder than -10°C (14°F).
- 154.1862 Posting of speed reduction.
- 154.1864 Vessel speed within speed reduction.
- 154.1866 Cargo hose connection: Transferring cargo.
- 154.1868 Portable blowers in personnel access openings.
- 154.1870 Bow and stern loading.
- 154.1872 Cargo emergency jettisoning.

TABLE 4—SUMMARY OF MINIMUM REQUIREMENTS

APPENDIX A TO PART 154—EQUIVALENT STRESS

APPENDIX B TO PART 154—STRESS ANALYSES DEFINITIONS

AUTHORITY: 46 U.S.C. 3703, 9101; 49 CFR 1.46.

SOURCE: CGD 74-289, 44 FR 26009, May 3, 1979, unless otherwise noted.

EDITORIAL NOTE: Nomenclature changes affecting Part 154 appear at CGD 95-072, 60 FR 50466, Sept. 29, 1995 and at CGD 96-041, 61 FR 50732, Sept. 27, 1996.

Subpart A—General

SOURCE: CGD 77-069, 52 FR 31626, Aug. 21, 1987, unless otherwise noted.

§ 154.1

§ 154.1 Incorporation by reference.

(a) Certain materials are incorporated by reference into this part with approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a). The Office of the Federal Register publishes a list "Material Approved for Incorporation by Reference," which appears in the Finding Aids section of this volume. To enforce any edition other than the one listed in paragraph (b) of this section, notice of change must be published in the FEDERAL REGISTER and the material made available. All approved material is on file at the Office of the Federal Register, Washington, DC 20408, and at the Commandant (G-MSO), U.S. Coast Guard, 2100 Second Street SW. Washington, DC 20593-0001.

(b) The materials approved for incorporation by reference in this part are:

American Bureau of Shipping (ABS)

ABS Plaza, 16855 Northchase Drive, Houston, TX 77060
Rules for Building and Classing Steel Vessels, 1981

American National Standards Institute

11 West 42nd Street, New York, NY 10036
ANSI Z89.1-69 Safety Requirements for Industrial Head Protection, 1969
ANSI Z87.1-79 Practice for Occupational and Educational Eye and Face Protection, 1979

American Society for Testing and Materials (ASTM)

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.
ASTM A 20/A 20M-97a, Standard Specification for General Requirements for Steel Plates for Pressure Vessels—154.610
ASTM F 1014-92, Standard Specification for Flashlights on Vessels—154.1400

NOTE: All other documents referenced in this part are still in effect.

International Maritime Organization

Publications Section, 4 Albert Embankment, London SE1 7SR, United Kingdom
Resolution A.328(IX), Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk, 1976
Code For Existing Ships Carrying Liquefied Gases in Bulk, 1976
Medical First Aid Guide for Use in Accidents Involving Dangerous Goods

46 CFR Ch. I (10-1-03 Edition)

Underwriters Laboratories, Inc.

12 Laboratory Drive, Research Triangle Park, NC 27709-3995
UL No. 783-79 Standard for Safety, Electric Flashlights for Use in Hazardous Locations, Class 1, Groups C and D, 1979.

[CGD 77-069, 52 FR 31626, Aug. 21, 1987, as amended by CGD 82-042, 53 FR 17705, May 18, 1988; CGD 82-042, 53 FR 18949, May 25, 1988; CGD 88-070, 53 FR 34535, Sept. 7, 1988; CGD 96-041, 61 FR 50732, Sept. 27, 1996; CGD 97-057, 62 FR 51048, Sept. 30, 1997; USCG-1999-5151, 64 FR 67183, Dec. 1, 1999; USCG-2000-7790, 65 FR 58463, Sept. 29, 2000]

§ 154.3 Purpose.

The purpose of this part is to prescribe rules for new and existing gas vessels.

§ 154.5 Applicability.

This part applies to each self-propelled vessel that has on board bulk liquefied gases as cargo, cargo residue or vapor, except subpart C does not apply if the vessel meets § 154.12 (b), (c), or (d).

§ 154.7 Definitions, acronyms, and terms.

As used in this part:

"A" *Class Division* means a division as defined in Regulation 3 of Chapter II-2 of the 1974 Safety Convention.

Accommodation spaces means public spaces, corridors, lavatories, cabins, offices, hospitals, cinemas, game and hobby rooms, pantries containing no cooking appliances, and spaces used in a similar fashion.

Boiling point means the temperature at which a substance's vapor pressure is equal to the atmospheric barometric pressure.

Breadth (B) means the maximum width of the vessel in meters measured amidships to the molded line of the frame in a ship with a metal shell and to the outer surface of the hull in a ship with a shell of any other material.

Cargo area means that part of the vessel that contains the cargo containment system, cargo pump rooms, cargo compressor rooms, and the deck areas over the full beam and the length of the vessel above them, but does not include the cofferdams, ballast spaces, or void spaces at the after end of the aftermost hold space or the forward end of the forwardmost hold space.